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| 10/586,993 | 07/21/2006 | Gunther Oskar Eckert | W1.2227 PCT-US | 9031 |
| 7590 Douglas R. Hanscom Jones, Tullar & Cooper P.O.Box 2266 Eads Station Arlington, VA 22202 | | | EXAMINER CHEN, YUAN L | |
| | | | ART UNIT 2854 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/586,993 | Applicant(s) ECKERT, GUNTHER OSKAR | |
| | Examiner Yuan L. Chen | Art Unit 2854 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 72,74,75,77-81 and 83-106 is/are pending in the application.
- 4a) Of the above claim(s) 74,75,77-81 and 83-106 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 72 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/18/2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 72 is objected to because of the following informalities:

“said at least two first print image locations” in line 16 should be changed to –said first print image location--, because the feature has been amended in lines 13 – 14;

“said image application system” in line 1 of page 12 should be changed to – said image application systems--, because the feature has been amended in line 16 of page 11; and

“said at least third print image location” in line 8 of page 11 should be changed to –said third print image location--, because the feature has been amended in lines 5 – 6.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 72 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kusunoki (Pub. No.: EP 1182035) in view of Wentworth (Patent No.: US 6253678), and further in view of Rodi (Patent No.: US 5806430).

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With respect to Claim 72, Kusunoki discloses in Figs. 1 - 2 as well as [0028] and [0050]: a printing press comprising:

a first printing group (P1 from the web direction as shown by the arrow) including a first forme cylinder (first PC) having a first forme cylinder axial direction (parallel to PC) and a first forme cylinder circumferential direction (arrow), and a first ink transfer cylinder (first BC) adapted to transfer a first portion of at least one common printed image ([0027] line 13) to a material (W) to be printed as the material (W) to be printed is passed through said first printing group (P1) in a production direction (arrow);

a second printing group (P2 in the web direction) including a second forme cylinder(second PC) having a second forme cylinder axial direction (parallel to PC) and a second forme cylinder circumferential direction (arrow), and a second ink transfer cylinder (second BC) adapted to transfer a second portion of said at least one common printed image ([0027] line 13) to the material (W) to be printed as the material (W) to be printed is passed through said second printing group (P2) in said production direction (arrow), said second printing group (P2) being located after said first printing group (P1) in said production direction (arrow);

at least one first printing forme (plate) on said first forme cylinder (first PC) and having at least first and second print image locations (image area of plates on PC₁ and PC₂), each of said at least first and second print image locations (image area of plates on PC₁ and PC₂) being correlated with said at least one common printed image ([0027] line 13), said first print image location (image area of the plate on PC₁) having a first

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print image location length in said circumferential direction (arrow) of said first forme cylinder (first PC) and a first print image location width in said axial direction (parallel to PC) of said first forme cylinder (first PC), said second print image location (printed by the plate on PC₂) having a second print image location length in said circumferential direction (arrow) of said first forme cylinder (first PC) and a second print image location width in said axial direction (parallel to PC) of said first forme cylinder (first PC), at least one of said first and second print image location lengths and said first and second print image location widths differing from each other by at least one of a first print image location length factor (image length of the plate on PC₁/image length of the plate on PC₂) and a first print image location width factor (image width of the plate on PC₁/image width of the plate on PC₂);

at least one second printing forme (plate) on said second forme cylinder (second PC) and having at least third and forth print image locations (image area of plates on PC₁ and PC₂), each of said at least third and forth print image locations (image area of plates on PC₁ and PC₂) being correlated with said at least one common printed image ([0027] line 13), said third print image locations (image area of the plate on PC₁) having a third print image location length in said circumferential direction (arrow) of said second forme cylinder (second PC) and a third print image location width in said axial direction (parallel to PC) of said second forme cylinder (second PC), said fourth print image location (printed by the plate on PC₂) having a second print image location length in said circumferential direction (arrow) of said second forme cylinder (second PC) and a forth print image location width in said axial direction (parallel to PC) of said second

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forme cylinder (second PC), at least one of said third and fourth print image location lengths and said first and second print image location widths differing from each other by at least one of a second print image location length factor (image length of the plate on PC₁/image length of the plate on PC₂) and a second print image location width factor (image width of the plate on PC₁/image width of the plate on PC₂);

image application systems ([0050] lines 4 – 6) adapted to form said first and second print image locations (image area of plate on PC₁ and PC₂) on said first printing forme (the plate on first PC) and said third and fourth print image locations (image area of plates on PC₁ and PC₂) on said second printing forme (the plate on second PC) on said first and second forme cylinder (first and second PC); and

a spacing of said at least first and second print image locations (image area of plates on PC₁ and PC₂) on said at least one first printing forme (plate) on said first forme cylinder (first PC), and a spacing of said at least third and fourth print image locations (image area of plates on PC₁ and PC₂) on said at least one second printing forme (plate) on said second forme cylinder (second PC) being arranged (column 6 lines 26 - 28) by said image application system ([0050] lines 4 – 6) on said first and second printing formes (plates), said first and second print image location length factors (image length of the plate on PC₁/image length of the plate on PC₂) and said first and second print image location width factors (image width of the plate on PC₁/image width of the plate on PC₂) each being as a function of at least one of said longitudinal misalignment and said transverse misalignment, said image application systems ([0050] lines 4 – 6)

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forming said print images on said forme cylinders (PC) dependent on said at least one of said longitudinal misalignment and said transverse misalignment.

Kusunoki discloses the adjustment of the axial and circumferential misalignment for PC_1 and PC_2 , but does not teach the adjustment is dependent on the elongation factors of the web.

However, Wentworth teaches in Figs. 1 – 3 and column 2 lines 36 - 52 and column 7 lines 14 - 17:

at least one of a longitudinal elongation (“growth of the substrate” in column 2 line 44) of the material (14) to be printed in said production direction (from left to right in Fig. 1) and a transverse elongation (“growth of the substrate” in column 2 line 44) of the material (14) to be printed transverse to said production direction, and occurring in the material to be printed as the material travels in said production direction from said first printing group (16-1) to said second printing group (16-2), said longitudinal elongation having a longitudinal elongation factor (S_i in column 5 lines 32 – 34), said transverse elongation having a transverse elongation factor (S_i in column 5 lines 32 – 34), said image application systems (17) forming said print images on said forme cylinders (16-1 and 16-2) dependent on (formula (4) in column 6 line 1) said at least one of said longitudinal elongation factor and said transverse elongation factor (S_i).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify Kusunoki’s print press with two printing forme cylinders printing at least four image locations by using Wentworth’s image application

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system to form the print images on the forme cylinders dependent on the elongation factors for the purpose of easily and quickly reducing misregistration due to the elongation of the web which includes the image location length and width factors to increase the quality of the printing.

This combination meets all the limitations of Claim 72 except using the image application systems prior to printing of said material to be printed.

However, Rodi teaches in Figs. 1 – 2 as well as column 2 lines 9 - 11 and column 7 lines 42 – 49, and 63 – 65 and column 8 lines 48 - 65: said image application systems (5/6 in Fig. 1) forming said print images on said forme cylinders (in 1) dependent on said at least one of said longitudinal elongation factor and said transverse elongation factor (Fig. 2) prior to (in advance in column 2 line 11 by using POSTSCRIPT stored in memory 11 in column 7 lines 42 – 49) printing of said material (2) to be printed.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify the combination of Kusunoki and Wentworth's print press with two printing forme cylinders printing at least four image locations by using Rodi's teaching to apply the image application systems prior to printing of said material to be printed for the purpose of easily and quickly reducing misregistration due to the elongation of the web to increase the quality of the printing.

This modification/combination meets all the limitations of Claim 72.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuan L. Chen whose telephone number is 571-270-3799. The examiner can normally be reached on Monday-Friday 7:30 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Judy Nguyen/
Supervisory Patent Examiner, Art Unit 2854

/yc/